UIL Holdings Corporation 157 Church Street PO Box 1564 New Haven CT 06506-0901 Phone 203.499.2000

May 30, 2013

Robert Stein Chairman Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

Re:

F2012/2013

Dear Chairman Stein:

I enclose an original and fifteen (15) copies of The United Illuminating Company's responses to the Connecticut Siting Council's pre-hearing interrogatories. If you have any questions about this filing, please do not hesitate to contact me at 203-499-2422.

Very truly yours,

Bruce L. McDermott

Managing Counsel - Operations

On Behalf of The United Illuminating Company

cc:

Service List

Enclosures

CSC-001

Company: The United Illuminating Company Witness: Mark Colca

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Date Submitted: May 30, 2013

CSC-001 Q: Provide the predicted (not actual) 50/50 forecast loads for 2003 through 2012

from The United Illuminating Company's (UI) 2003 forecast report.

CSC-001 A: The weather adjusted annual energy sales (50/50 forecast loads) for 2003 through

2012 from UI's 2003 forecast report are as follows:

2003	5,715 GWh
2004	5,765 GWh
2005	5,777 GWh
2006	5,805 GWh
2007	5,833 GWh
2008	5,877 GWh
2009	5,890 GWh
2010	5,919 GWh
2011	5,948 GWh
2012	5,998 GWh

Company: The United Illuminating Company Witness: Robert Manning

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Date Submitted: May 30, 2013

CSC-002 Q: Explain the methodology of how historical actual peak load data are converted to

weather-normalized historical peak load data.

CSC-002 A: The historic peak loads are normalized using regression models that relate daily MW System Peak Loads to the respective daily 12-hour average (prior to the peak hour) temperature humidity index (THI) for the period June 1 through August 31. THI is an index to determine the effect of summer conditions on human comfort combining temperature and humidity. Only THI observations greater than 70 are used in each year's normalization equation.

The peak normalization develops a "90/10" System Peak Load normalized value, as well as a "most likely" or "50/50" value. Hourly system peak data are analyzed to determine the hours of the day that the UI system most frequently reached its peak load. The analysis showed that UI's system peaks typically occurred between 3:00 pm and 5:00 pm during the past ten-years. Therefore, the 3:00 pm through 5:00 pm daily peak observations are typically used to calculate the "50/50" and "90/10" 12-hour average THI weather normal value.

However, in 2012, due to inclement weather, the peak occurred at 2:00 pm, which is not typical for a peak load day. In the hours following 2:00 pm, the system load quickly dropped off in a fashion very inconsistent with the normal UI load profile for a peak load day. The drop off in load was due to a drop in temperature as a result of overcast conditions and light precipitation. These weather conditions also caused a drop in photovoltaic output increasing system load. As a result, it was necessary to make an adjustment to the 2012 actual peak. The measured system peak was lowered to account for the loss of distributed generation and it was increased based on average difference between the system peak loads between the hours ending 2:00 pm and 5:00 pm. These adjustments resulted in an adjusted system peak of 1,352 MW and a "90/10" normalized peak of 1,339 MW in 2012.

The models developed for the respective year and hour are used to weather normalize the historic actual peak load values to a "most likely" and "extreme" weather condition.

CSC-003

Company: The United Illuminating Company Witness: Donna Wells

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Date Submitted: May 30, 2013

CSC-003 Q: Provide a break-down of the projected number of megawatts (MW) of load reduction for UI's territory due to conservation, load response/load management, and distributed generation (if applicable) for each year from 2013 through 2022. If possible, also include a similar estimated break-down by megawatt-hours or gigawatt-hours.

CSC-003 A: The breakdowns are shown in the following table.

	Load Reduction (MW)				Annual Sales Reductions (Gwhrs)	
	Annual Incremental CLM	Annual Incremental DG	Annual Cumulative CLM*	Annual Cumulative DG*	Annual Incremental CLM	Annual Incremental DG
2013	5.13	2.65	(5.28)	(2.73)	-79	-10
2014	5.31		(10.75)	(2.73)	-113	-4
2015	5.44		(16.35)	(2.73)	-110	-4
2016	5.78		(22.30)	(2.73)	-75	
2017	5.82		(28.28)	(2.73)	-75	
2018	5.87		(34.33)	(2.73)	-75	
2019	5.94		(40.44)	(2.73)	-42	
2020	6.02		(46.64)	(2.73)	-43	
2021	6.06		(52.87)	(2.73)	-43	
2022	6.08		(59.13)	(2.73)	-43	

^{*&}quot;grossed up " 2.85% for line losses

Company: The United Illuminating Company Witness: Robert Manning

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Date Submitted: May 30, 2013

CSC-004 Q: Provide the basic underlying assumptions associated with the distributed generation (DG) included in the 2013 UI Forecast, including but not limited to the DG projects approved, number of megawatts of each DC- project the number of units expected to go into service or the assumed probability that they will go into service, etc.

CSC-004 A: As in previous years, the 2013 UI forecast includes distributed generation (DG) units that were on-line and part of the historical data set used to develop UI's forecast for sales and peak load. DG units collectively reduce energy and peak demand forecasts.

From 2013 forward, all DG projects that were approved by PURA to receive monetary grants and have not been built are no longer included in the development of the overall sales and peak demand forecasts as the monetary grants associated with these units have expired.

UI becomes aware of any new DG units expecting to come on-line through interconnection applications that are received. An incremental reduction in the system peak load forecast due to DG is projected to be 2.73 MW in 2013 and no incremental impact in subsequent years. The 2.73 MW is based on eight projects totaling 2.65 MW grossed-up to account for distribution losses. The projects represent interconnection applications the Company has received for units over 100 kW.

Assumptions for new DG associated with new public policy programs are included in the sales forecasts as projects are defined and approved by PURA. For example, estimates of the impact to sales were developed from the specifications provided by the bidders of the round one LREC/ZREC medium and large project winning bids. As a result, the development of the sales forecast includes reduction in sales by 10, 4 and 4 GWhr of energy in 2013, 2014 and 2015, respectively, due to the impact of incremental DG.

CSC-005

Company: The United Illuminating Company Witness: Robert Manning

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Date Submitted: May 30, 2013

CSC-005 Q: Does UI's 2013 Forecast include any additions due to possible loads and/or

electrical energy consumption from electric vehicles? If yes, provide any

assumptions made regarding electric vehicles.

CSC-005 A: UI's 2013 sales and peak load forecasts do not include any additions explicitly

based on assumptions related to electric vehicles. As electrical vehicles are connected to the system, their contribution to energy consumption and peak load

will be included in the historic data sets used to develop the forecast models.